

Extreme Rainfall Return Periods

Location: Darndale, Priorswood
Average Annual Rainfall:

Maximum rainfall (mm) of indicated duration expected in the indicated return period.

Duration		Return Period (years)											
		1/2	1	2	3	4	5	10	20	30	50	75	100
5 min	5	2.5	3.5	4.0	4.8	5.4	5.8	7.2	8.7	9.7	11.2	12.5	13.5
10 min	10	3.5	4.8	5.6	6.7	7.5	8.1	10.0	12.1	13.6	15.6	17.4	18.8
15 min	15	4.1	5.7	6.6	7.9	8.8	9.5	11.7	14.3	16.0	18.3	20.4	22.1
30 min	30	5.4	7.4	8.5	10.2	11.3	12.1	14.9	18.0	20.0	22.8	25.3	27.3
60 min	60	7.1	9.7	11.1	13.1	14.4	15.5	18.9	22.6	25.0	28.4	31.4	33.7
2 hour	120	9.4	12.6	14.3	16.9	18.5	19.8	23.9	28.4	31.4	35.4	39.0	41.7
3 hour	180	11.0	14.8	16.7	19.5	21.4	22.8	27.4	32.5	35.8	40.3	44.2	47.2
4 hour	240	12.4	16.5	18.6	21.7	23.7	25.3	30.3	35.7	39.3	44.1	48.3	51.6
6 hour	360	14.6	19.3	21.7	25.2	27.5	29.2	34.8	40.9	44.8	50.1	54.8	58.4
9 hour	540	17.2	22.5	25.2	29.2	31.7	33.7	40.0	46.7	51.1	57.0	62.2	66.1
12 hour	720	19.3	25.1	28.1	32.4	35.2	37.3	44.1	51.4	56.1	62.5	68.0	72.2
18 hour	1080	22.7	29.3	32.7	37.5	40.7	43.1	50.7	58.8	64.0	71.0	77.1	81.7
24 hour	1440	25.5	32.8	36.4	41.7	45.1	47.7	55.9	64.7	70.2	77.8	84.3	89.2
48 hour	2880	31.5	39.7	43.7	49.5	53.3	56.1	64.9	74.3	80.1	88.1	94.8	99.9

Notes: Larger margins of error for 1, 2 ,5 and 10 minute values and for 100 year return periods
M560: 13.1 M52d: 50 M560/m52d: 0.26

Rainfall Intensities increased by 20% to allow for Global Warming

Duration		Return Period (years)											
		1/2	1	2	3	4	5	10	20	30	50	75	100
5 min	5	3.0	4.2	4.8	5.8	6.5	7.0	8.6	10.4	11.6	13.4	15.0	16.2
10 min	10	4.2	5.8	6.7	8.0	9.0	9.7	12.0	14.5	16.3	18.7	20.9	22.6
15 min	15	4.9	6.8	7.9	9.5	10.6	11.4	14.0	17.2	19.2	22.0	24.5	26.5
30 min	30	6.5	8.9	10.2	12.2	13.6	14.5	17.9	21.6	24.0	27.4	30.4	32.8
60 min	60	8.5	11.6	13.3	15.7	17.3	18.6	22.7	27.1	30.0	34.1	37.7	40.4
2 hour	120	11.3	15.1	17.2	20.3	22.2	23.8	28.7	34.1	37.7	42.5	46.8	50.0
3 hour	180	13.2	17.8	20.0	23.4	25.7	27.4	32.9	39.0	43.0	48.4	53.0	56.6
4 hour	240	14.9	19.8	22.3	26.0	28.4	30.4	36.4	42.8	47.2	52.9	58.0	61.9
6 hour	360	17.5	23.2	26.0	30.2	33.0	35.0	41.8	49.1	53.8	60.1	65.8	70.1
9 hour	540	20.6	27.0	30.2	35.0	38.0	40.4	48.0	56.0	61.3	68.4	74.6	79.3
12 hour	720	23.2	30.1	33.7	38.9	42.2	44.8	52.9	61.7	67.3	75.0	81.6	86.6
18 hour	1080	27.2	35.2	39.2	45.0	48.8	51.7	60.8	70.6	76.8	85.2	92.5	98.0
24 hour	1440	30.6	39.4	43.7	50.0	54.1	57.2	67.1	77.6	84.2	93.4	101.2	107.0
48 hour	2880	37.8	47.6	52.4	59.4	64.0	67.3	77.9	89.2	96.1	105.7	113.8	119.9